Fields of Opportunities

STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
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DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

March 4, 2010

To: UST Owner/Operators
From: Elaine Douskey
Re: Class C written basic operating instructions

I want to update you on operator training and provide you with some guidance on what is required for Class C operator instructions, which must be posted on site by April 14, 2010.

Chapter 135.4(6) explains the requirements for operator training. All regulated UST facilities will require an A, B and C designated operator(s). We just approved our first training provider and program and expect to receive other training programs for approval. Check our website for updates on training providers. Training must be completed by December 31, 2011. A facility may not operate after this date without trained operators.

One of the early provisions of the rule [135.4(10)] requires that written basic operating instructions, emergency contact names and telephone numbers, and basic procedures specific to the facility be provided to the Class C operator by April 14, 2010. A Class C operator is an on-site employee, usually a clerk who typically monitors the dispensing of product, and is the first to respond in the event of an emergency or spill. These employees must be provided the written materials by April 14, 2010 even though they may not be trained yet as a Class C Operator.

To help Class A, B and C operators better understand basic operations and maintenance of UST systems, we have prepared a manual, UST Basics, which may be found on our website under Owner/Operator Training: http://www.iowadnr.gov/land/ust/ustowners.html.

We want to give you examples of what we have in mind for operating instructions, contacts and procedures to be provided to the Class C Operators. For more information or questions, contact Tom Collins at (515) 281-8879 (Tom.Collins@dnr.iowa.gov) or Paul Nelson at (515) 281-8779 (Paul.Nelson@dnr.iowa.gov).

Written emergency response procedures posted in a clearly visible location that include:

- The phone number(s) to reach the fire and police departments
- The names and phone numbers of company personnel (Class A and B Operators) who should be notified in an emergency
- The phone number of the DNR Emergency Response
- The location and proper use of spill cleanup equipment
- Any site specific emergency procedures
- Location of Class A/B Fire Extinguishers

- How to Respond to a Small Spill of Petroleum

- Spill Kit Items and Instructions in how to use them

- Procedures for **overfill prevention** during the delivery of regulated substances
    - Type of overfill prevention equipment
    - How to respond to an overfill

- ATG Alarms: what they mean and how to respond

Emergency Contacts & Phone Numbers

Emergency*	**911**
Fire Department	
Police	
Class B Operator	
Manager	
Assistant Manager	
Petroleum Service Provider	

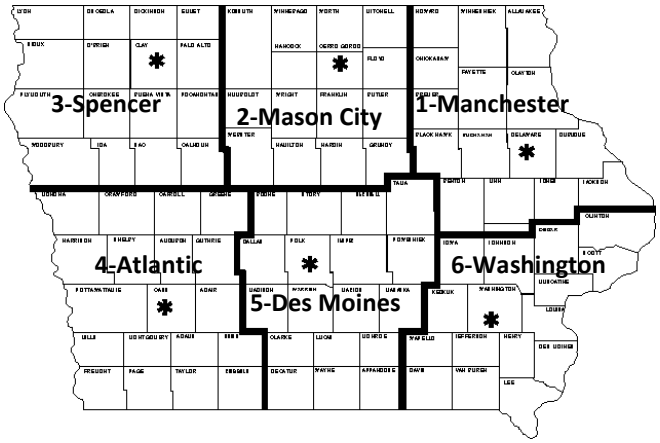
***WHEN TO CALL 9-1-1**

- Call 9-1-1 when life and/or property are in immediate danger
- When you see smoke or a fire.
- When rescue or emergency medical assistance is needed.

Iowa DNR Contacts	
DNR Emergency Response: (24 hour phone)	(515) 281-8694 or fax (515) 725-0218
UST Central Office: (work hours phone)	(515) 281-8941 or fax (515) 281-8895
Use the Release Report Form to fax within 24 hours or 6 hours if an emergency condition exists: http://www.iowadnr.gov/land/ust/ustrelease.html	

Iowa DNR Field Office Contacts					
Field Office	**Phone**	**Fax**	**Field Office**	**Phone**	**Fax**
1-Manchester	(563) 927-2640	(563) 927-2075	4-Atlantic	(712) 243-1934	(712) 243-6251
2-Mason City	(641) 424-4073	(641) 424-9342	5-Des Moines	(515) 725-0268	(515) 725-0218
3-Spencer	(712) 262-4177	(712) 262-2901	6-Washington	(319) 653-2135	(319) 653 2856

DNR Field Office Locations



Class C Operator Emergency Response Procedures

Dispensing a Regulated Substance
As an operator of a gasoline dispensing facility you are the first line of response to emergencies involving hazardous, flammable and combustible liquids. Soon you will be trained as a Class C Operator according to DNR operator training requirements. In the meantime, you must be familiar with emergency procedures in order to protect yourself, the public and the environment and to know how to respond to emergencies involving gasoline and other dispensed fuels.

It is important to understand why gasoline and other fuels present concerns. While these fuels have toxic properties, are highly flammable, and can negatively impact the environment, the risks can be prevented or greatly minimized with proper management and quick response to accidents.

TOXIC
Gasoline is a manufactured mixture that does not exist naturally in the environment. It is produced by the process of refining crude oil. Gasoline contains hundreds of individual chemicals, including benzene, toluene and xylene which are toxic and can be harmful to humans. You may be able to avoid breathing in vapors because you can smell benzene in gasoline, but it can also soak through your skin and you can't feel it. Don't let gasoline come in contact with your skin and avoid breathing gasoline vapors as much as possible.

FLAMMABLE
Gasoline is also a flammable liquid, which means it will ignite easily in the presence of an ignition source. It takes only a heat source or a spark to ignite gasoline. A release of gasoline can create severe fire hazards near traffic, in buildings, or in sewers. Further, gasoline in a confined space that is ignited can result in an explosion. As such, we cannot emphasize enough the importance of observing and enforcing your no-smoking policies around fueling facilities. Gasoline in a sanitary sewer can also present explosion threats and disable a wastewater treatment plant's ability to treat sewage.

ENVIRONMENTAL IMPACTS
Gasoline and its vapors are not only harmful to humans, but also to the atmosphere, the soil, and the groundwater. When gasoline is exposed to air (for example, when product is transferred either to a storage tank or a vehicle), it releases hydrocarbons that react with other compounds in the air and forms ground-level ozone. Ground-level ozone is a "greenhouse gas" that contributes to disruptions in our global climate.

Gasoline and other fuels can kill aquatic life and wildlife if it reaches surface water through a storm sewer. Gasoline spills and releases can percolate to groundwater. We Iowans rely on groundwater for nearly 80 percent of our drinking water. Needless to say, one wouldn't want to drink groundwater contaminated with gasoline. Only one gallon of fuel leaking each week from a poorly maintained spill bucket can result in up to 195 tons of contaminated soil in a year. That is why we have regulations for petroleum dispensing facilities: to protect you, the public and the environment.

BE PREPARED TO RESPOND

Gasoline dispensing facilities are built to prevent spills, leaks and fires, but sound planning and construction can't always account for those situations or accidents caused by customers. How many times have you seen a customer not attend to the filling process? A customer may get back into the vehicle or walk into the store while the vehicle is being filled with fuel. It seems thoughtless to us, but it happens all the time. If the latch open device fails to close, gasoline pours onto the surface creating a hazardous situation. Is this an emergency? Do you know how to respond?

In general, a hazardous emergency situation is when a spill or release of a hazardous liquid, such as gasoline and other fuels, places the safety and health of the environment and/or public in danger. Is a spill of gasoline—sufficient enough in quantity to create a stream of product running down the pavement to the storm sewer—a hazardous emergency situation? What if you smelled petroleum vapors inside the building where you are working? Is that a hazardous emergency situation? You shouldn't have to think about how to answer those questions. Remember, if you even <u>think</u> about calling the fire department or HazMat team, it is an emergency.

RESPONDING TO SMALL PETROLEUM SPILLS

You can handle some spills, for example a small spill of gasoline or diesel that occurred when a customer overfilled a vehicle, and there exists no immediate threat to the public or to the environment. But if the spill is on fire, that is a hazardous emergency situation. Know what to do when responding to a small petroleum spill:

1) Stop the spill. Disengage the stuck nozzle or shut off the dispenser. You must know the location of the emergency shut-off switch that shuts down the power to the pumps and dispensers. You may have to use this to stop the spill. Have a bucket available to catch spills or drips until they can be stopped. If a customer complains of a slow flow problem, shutdown the pump for that product line and call the petroleum service provider.

2) Contain and recover the spill. Spread material such as kitty litter, sand, sawdust, wood chips, peat, synthetic sorbent pads and booms, or dirt from the roadside to absorb and stop the flow of the petroleum on pavement. Keep this sorbent material readily available just for such situations. Remember, the petroleum-soaked material is still flammable.

3) Collect the petroleum-soaked material. Do not touch the material with bare hands—wear rubber gloves. Use brooms to sweep up the material and put it into buckets, garbage cans or barrels or on top of plastic sheeting. Store the sorbent for proper treatment and disposal. Call the DNR Field Office in your region to find out if "thin-spreading" or "land-applying" the sorbent material is appropriate. If not you will have to call a hazardous waste company to collect, treat or dispose of the material.

4) Do not flush the contaminated area with water. Washing down a spill can quickly move petroleum from a roadway to a storm sewer, stream or lake.

5) Do not use dispersants. Detergents or dispersants can dissolve petroleum, but only for a short while and then it will reform. Sometimes after using dispersants, vapors actually increase and create a more toxic environment.

6) Report the spill. Remember: if gasoline or other fuels reach a stream, a sanitary sewer or storm sewer or vapors are detected inside a building or a fire occurs—a hazardous emergency condition is present, and matters are beyond your control. Call the emergency numbers.

EMERGENCY SHUT-OFF SWITCH

In case of an emergency, a Class C Operator may need to swiftly shut down power at all the pumps and dispensers in order to stop the escape of fuel. This is done by locating the emergency shut-off switch, which is required by national fire codes. The emergency shut-off switch shuts off power to all the dispensers and fuel pumps. The emergency stop switch is different from the "Stop" or "All Stop" button on the point-of-sale (POS) console. Make sure you know the location of the emergency shut-off switch.

Equipment List for Petroleum Small Spill Kit

Item	Quantity
Shovel, non-sparking	1
Gloves, rubber	3
Pail, 5-gallon	1
Drum, 30 gallon	1
Label for Drum	1
Goggles, splash proof	2
Absorbent material (kitty litter, peat)	1 - 16lb. bag of peat
Absorbent socks	3 - 2"x10"
Absorbent pads	25
Broom and dust pan	1

PROCEDURES FOR OVERFILL PREVENTION DURING DELIVERY OF FUEL

What To Do Before Filling Your USTs

- Post clear signs that alert delivery persons to the overfill devices and alarms in use at your facility
- Make and record accurate readings for product and water in the tank before fuel delivery
- Order only the quantity of fuel that will fit into 90% of the tank

REMEMBER, the formula for determining the maximum amount of gasoline to order is:
(Tank capacity in gallons x 90%) – Product currently in tank = Maximum amount of fuel to order. **Example:** (10,000 gal x 0.9) – 2,000 gal = 7,000 gal maximum amount to order

- Ensure fuel delivery personnel know the type of overfill device present at the tank and what actions to perform if it activates
- Review and understand the spill response procedures.
- Verify that your spill bucket on the tank is empty, clean, and will contain spills

What To Do While Your USTs Are Being Filled

- Keep fill ports locked until the fuel delivery person requests access

- Have an accurate tank capacity chart available for the fuel delivery person
- The fuel delivery person makes all hook-ups. The person responsible for monitoring the delivery must remain attentive and observe the entire fuel delivery, be prepared to stop the flow of fuel from the truck to the UST at any time, and respond to any unusual condition, leak, or spill which may occur during delivery
- Have response supplies readily available for use in case a spill or overfill occurs (see spill kit items above)
- Provide safety barriers around the fueling zone
- Make sure there is adequate lighting around the fueling zone

What To Do After Filling Your USTs

- Following complete delivery, the fuel delivery person is responsible for disconnecting all hook-ups
- Return spill response kit and safety barriers to proper storage locations
- Make and record accurate readings for product and water in the tank after fuel delivery
- Verify the amount of fuel received
- Make sure fill ports are properly secured
- Ensure the spill bucket is free of product and clean up any small spills